

Please amend the abstract as follows:

An apparatus is provided for quantitatively measuring combinations of magnetic particles combined with analytes samples whose amount or other characteristic quality is to be determined. The samples are arranged in a predefined pattern and magnetic particles are complexed with the analytes to be determined and are excited in a magnetic field. The magnetizations of the magnetic particles are thereby caused to oscillate at the excitation frequency in the manner of a dipole to create their own fields. These fields are inductively coupled to at least one substantially flat sensor such as sensing coils fabricated in a gradiometer configuration. The output signals from the sensing coils are appropriately amplified and processed to provide useful output indications.

Please amend the claim as follows:

1. (currently amended) An apparatus ~~for capable~~ of quantitative magnetic measurement of samples, each sample arranged in a predefined pattern and disposed in a sample holder, comprising:  
a magnetic field source to apply a magnetic field to the sample, the magnetic field source defining a gap in which a sample holder is movably disposed;  
a substantially flat magnetic field sensor to sense an induced magnetic moment from the sample and configured and arranged in a gradiometer configuration to substantially eliminate the contribution of the magnetic field source to the sensing, the magnetic field sensor having a sensing area substantially the same as the extent of each sample, the magnetic field sensor having an output to communicate output signals, the magnetic field sensor disposed substantially within the gap of the magnetic field source.

#### REMARKS

Claim 1 is pending in this case, and has been amended here. Applicants request reconsideration and allowance of all pending claims.

Claim 1 has been rejected as allegedly anticipated by Masuda. This rejection is traversed with respect to the amended claim as follows.